ANNUAL REPORT on the ENVIRONMENT

2003



Fairfax County, Virginia Environmental Quality Advisory Council

Printed on recycled paper

BOARD OF SUPERVISORS

Katherine K. Hanley, Chairman

Gerald R. Hyland, Vice Chairman Mount Vernon District

Sharon BulovaCatherine M. HudginsBraddock DistrictHunter Mill District

Gerald E. Connolly
Providence District

Dana Kauffman
Lee District

Michael R. FreyElaine McConnellSully DistrictSpringfield District

Penelope A. GrossStuart MendelsohnMason DistrictDranesville District

ENVIRONMENTAL QUALITY ADVISORY COUNCIL

Robert McLaren, Chairman Stella M. Koch, Vice Chairman

Frank B. Crandall
John W. Foust
Johna Gagnon
Johna Gagnon
Marcia Johns
George W. Lamb
Gabriel Markisohn

Lyle C. McLaren
Daniel Mendelson
J. Craig Potter
Rachel Rifkind
Sheila M. Roit, R.N.
James A. Roorbach, III

Anthony H. GriffinCounty Executive

Robert A. StalzerDeputy County Executive

INTRODUCTION

This year's Annual Report on the Environment has been prepared entirely by the Environmental Quality Advisory Council (EQAC). Staff support for the coordination and printing of the Report has been provided by the Planning Division of the Department of Planning and Zoning.

The Annual Report on the Environment, which is an update on the state of the County's environment, serves a threefold purpose. Initially, it is intended to assist the Board of Supervisors in evaluating ongoing environmental programs and to provide the basis for proposing new programs. The document also aids public agencies in coordinating programs to jointly address environmental issues. In addition, the report is directed to citizens who are concerned with environmental issues.

The Report contains chapters on major environmental topics including: water resources; air quality; ecological resources; wildlife management; solid waste; hazardous materials; noise, light, and visual pollution; and land use and transportation. Within each chapter are: a discussion of environmental issues; a summary of relevant data; and a discussion of applicable government programs. Where relevant, discussions of legislative issues are provided. Most of the chapters conclude with recommendations that identify additional actions that EQAC believes are necessary to address environmental issues.

This report covers activities affecting the environment in 2002; however, in some cases, activities from early 2003 are also included. This report is meant to serve as an update from the 2002 Annual Report on the Environment; the reader is advised to review the 2002 Annual Report if more background information about a particular topic is desired.

While the Environmental Quality Advisory Council has prepared and is responsible for this Report, contributions were made by numerous organizations. Many of the summaries provided within this report were taken verbatim from materials provided by these organizations. EQAC therefore extends its appreciation to the following organizations:

Audubon Naturalist Society

Clean Fairfax Council, Inc.

Coalition for Smarter Growth

Fairfax County Attorney's Office

Fairfax County Deer Management Committee

Fairfax County Department of Health

Fairfax County Department of Systems Management for Human Services Fairfax County Department of Planning and Zoning

Fairfax County Department of Public Works and Environmental Services

Fairfax County Department of Transportation

Fairfax County Environmental Coordinator

Fairfax County Fire and Rescue Department

Fairfax County Non-Motorized Transportation (Trails) Committee

Fairfax County Park Authority

Fairfax County Police Department, Division of Animal Services

Fairfax County Water Authority

Fairfax Joint Local Emergency Planning Committee

George Mason University, Departments of Biology and Environmental Science

Illuminating Engineering Society of North America

International Dark-Sky Association

Interstate Commission on the Potomac River Basin

Metropolitan Washington Airports Authority (MWAA)

Metropolitan Washington Council of Governments (COG)

National Electrical Manufacturers Association

Northern Virginia Conservation Trust

Northern Virginia Regional Commission

Northern Virginia Regional Park Authority

Northern Virginia Soil and Water Conservation District

Occoquan Watershed Monitoring Laboratory

Reston Association

United States Fish and Wildlife Service

United States Geological Survey

Upper Occoquan Sewage Authority

Virginia Department of Conservation and Recreation

Virginia Department of Forestry

Virginia Department of Game and Inland Fisheries

Virginia Department of Environmental Quality

Virginia Department of Transportation

Virginia Outdoor Lighting Taskforce

In addition, EQAC wishes to acknowledge the efforts of the County's interagency Environmental Coordinating Committee, which coordinated the staff responses to the recommendations within EQAC's 2002 *Annual Report on the Environment*.



VIRGINIA

Board of Supervisors County of Fairfax 12000 Government Center Parkway Fairfax, VA 22035

Madam Chairman and Members of the Board:

EQAC is pleased to present the 2003 Annual Report on the Environment. In this report, we discuss various environmental issues in Fairfax County. We do this in eight chapters – each chapter addressing a different aspect of the environment. Also in each chapter are EQAC's recommendations as to what actions Fairfax County should take to resolve identified problems.

EQAC's top priority recommendations from the 2003 Annual Report on the Environment are in the same area as last years – air quality. EQAC recognizes that the Board of Supervisors and the County staff have undertaken a number of actions in this area. For example, the County's telecommuting program is the best in the region and actions to select lower-emissions vehicles in the County's fleet replacement program are steps in the right direction. However, a number of actions remain to be taken as indicated in our report. Last year EQAC said the following in the Chairman's letter:

A major problem has been lack of staff resources. Unfortunately, EQAC doesn't see any alternative but to increase staff resources in this area.

However, no increase in staff resources occurred. Rather, the Health Department has a reduced number of professionals following air quality issues. As a result, EQAC's ability to assess the status of air quality in Fairfax County has been affected. The annual Air Quality Report was substantially delayed in 2003. Instead of hiring an Air Quality Planner as EQAC recommended, the Board chose to add responsibilities for air quality to the duties of the Environmental Coordinator. Unfortunately, the Environmental Coordinator has no professional staff, so this action increased the workload on a very capable, but already overloaded, individual.

EQAC therefore strongly urges full funding for staff in the Health Department supporting air quality management activities in the County. Furthermore, EQAC urges the County to take a proactive approach to developing a stronger air quality program. Failure in this area can result in severe financial consequences for the County.

EQAC also notes the interrelationship between land use and transportation strategies and air and water quality. As changes to land uses and transportation strategies are contemplated, the impact of air and water quality must be evaluated.

Board of Supervisors Continued

While EQAC points out in this Annual Report that more needs to be done in the air quality area, the Board of Supervisors can take credit for some very noteworthy actions. The passage of the revised light ordinance satisfies an EQAC recommendation of the past several years. Subsequent to this, the County Staff prepared an outstanding brochure explaining the new ordinance.

The County's progress in the area of water quality continues to address EQAC's past recommendations. The Countywide Stream Protection Plan and Watershed Management Program, the perennial stream mapping project, and the changes to the Chesapeake Bay Ordinance are examples where the County is making good progress. EQAC, of course, continues to remain concerned about a secure funding source for these activities.

Each chapter of this year's Annual Report contains the remainder of our suggestions. We urge your consideration and action on each of these.

This report covers 2002, but also includes significant actions from 2003 that could impact EQAC's comments and recommendations. Unfortunately, the report cannot capture all ongoing actions or the report would never be finished.

As we have done in the past, we would like to commend the outstanding efforts of some groups whose actions enhance the environmental quality in Fairfax County. The Northern Virginia Soil and Water Conservation District (NVSWCD) continues to make their efforts felt in many environmental areas – both as teachers and doers. Their efforts in stream bank restoration are very noteworthy. The Northern Virginia Conservation Trust (NVCT) is pursuing and successfully obtaining easements on privately owned environmentally sensitive land. Volunteers from the Audubon Naturalist Society (and the NVSWCD) provide valuable data on water quality. Fairfax ReLeaf continues to promote tree preservation and tree replacement programs. The Park Authority staff continues to have a few people, working with a very small budget, who are slowly enhancing environmental efforts in the County's parks. EQAC thanks all these hard working groups, as well as many others we haven't mentioned, for their efforts in advancing environmental quality in Fairfax County.

EQAC would also like to commend the County Staff for their outstanding efforts. Of special note are the activities of the Environmental Coordinating Committee (ECC). EQAC has met with the ECC on environmental issues and will continue to do so. ECC's focus on environmental issues is resulting in improvements in County policy dealing with the environment and has greatly improved County actions in environmental areas. EQAC also notes that increased attention is being given to water quality in DPWES – and the results are showing.

Members of EQAC wrote this report; however, we obtained most of the information contained therein from many County agencies. We thank them for their assistance. EQAC would especially like to acknowledge the contributions of two individuals. First, Noel Kaplan of the Environmental and Development Review Branch, Department of Planning and Zoning. Noel provides County staff support to EQAC. This means he sets up every EQAC meeting, attends every EQAC meeting, follows up on actions generated from the meetings, plus coordinates the inputs and publication of the Annual Report. EQAC thanks him for his hard work and long hours in our support. Second, Kambiz Agazi, Environmental Coordinator, Office of the County

Board of Supervisors Continued

Executive. Kambiz attends every EQAC meeting and provides advice and suggestions. He often follows up after the meetings by providing additional information. His insight and overview of County environmental activities are invaluable. EQAC thanks him for his assistance and valuable contributions.

We would like to commend the Board's actions, as noted in this report, in advancing the environmental quality of the County. Every year the County makes progress. However, much more needs to be done. EQAC remains especially concerned about the impact of the County's financial shortfall on environmental programs. We would like to encourage you not to cut these valuable environmental programs and reverse the gains the County has made.

Your leadership continues to be essential to advancing environmental quality in Fairfax County by preserving and protecting environmentally sensitive areas. We in EQAC will continue to provide recommendations to you on how to achieve this goal. We look forward to working with you and achieving further progress in this area.

Respectfully submitted,

Robert D. McLaren, Chairman

Environmental Quality Advisory Council

TABLE OF CONTENTS

I.	WA	ATER	R RESOURCES	I-1
	A.	OV.	ERVIEW	I-1
		1.	Streams	I-1
		2.	Watersheds	I-1
		3.	Stream Ecosystems and Communities	I-3
		4.	Communities	I-3
		5.	Oxygen	I-3
		6.	Trees, Wetlands, and Buffers	I-3
		7.	Nutrients	I-4
		8.	Groundwater and the Water Cycle	I-4
	В.	POI	LLUTANTS AND OTHER IMPACTS ON STREAMS	I-4
		1.	Point and Nonpoint Source Pollution	I-4
		2.	The Effect of Imperviousness on Streams	I-5
	C.	STF	REAM AND WATERSHED ANALYSES	I-5
		1.	Countywide Stream Assessments	I-6
		2.	Fairfax County Health Department Water Quality Report	I-10
		3.	Health Department Volunteer Monitoring Program	
			(Adopt-a-Stream)	I-13
		4.	Virginia Department of Environmental Quality (DEQ)	I-13
		5.	Special Stream Reports and Programs	I-16
	D.	PO	NDS AND LAKES	I-19
		1.	Reston Lakes	I-19
		2.	Pohick Watershed Lakes	I-21
		3.	Lake Barcroft	I-21
		4.	Lake Accotink	I-22
		5.	Other Ponds and Lakes	I-22
	Ε.	STO	DRMWATER MANAGEMENT	I-22
		1.	Status of Stormwater Utility (Environmental Stormwater Utility)	
			Concept in Fairfax County	I-22
		2.	Status of NPDES Requirements	I-23
		3.	Regional Stormwater Management Program	I-23
		4.	Stormwater Treatment Facilities in Fairfax County	I-24
		5	Infill and Residential Development Study	I-25

I. WATER RESOURCES (continued)

F.	NO	NPOINT SOURCE POLLUTION PROGRAMS	I-26
	1.	Chesapeake Bay Program and Agreements	I-26
	2.	The Virginia Chesapeake Bay Preservation Act and Regulations	I-26
	3.	Erosion and Sedimentation Control and Enforcement—	
		Fairfax County Department of Public Works and	
		Environmental Services	I-27
	4.	Occoquan Basin Nonpoint Pollution Management Program	I-28
	5.	Soil and Water Conservation Technical Assistance	I-29
	6.	Stream Valley Reforestation	I-30
	7.	Stream Bank and Other Stabilization Projects	I-31
	8.	Septic Permitting and Repairs	I-32
G.	PEF	RENNIAL STREAM MAPPING PROJECT	I-32
Н.	WA	TERSHED PLANNING AND MANAGEMENT	I-32
	1.	Countywide Watershed Planning	I-32
	2.	Reston Watershed Plan	I-33
	3.	New Millennium Occoquan Watershed Task Force	I-33
I.	GR	OUNDWATER ASSESSMENT	I-33
J.	DRI	INKING WATER SUPPLY	I-34
	1.	Wells	I-34
	2.	Lorton and Corbalis Systems Monitoring Results and Reports	I-35
	3.	Source Water Assessments	I-37
	4.	Facilities Management	I-37
	5.	Regional Cooperative Water Supply Agreements	I-38
K.	NEV	W LAWS OR REGULATIONS	I-39
	1.	Amendments to the Chesapeake Bay Regulations	I-39
	2.	Amendments to the Policy Plan	I-39
L.	SUN	MMARY	I-40
Μ.	REC	COMMENDATIONS	I-41
LIST	OF R	REFERENCES	I _44

II.	AIR QUALITY			II-1
	A.	ISSU	UES AND OVERVIEW	II-1
		1.	Introduction	II-1
		2.	Air Quality Status in Northern Virginia	II-5
	В.	MA.	JOR PUBLIC AGENCY RESPONSIBILITIES	II-11
		1.	Introduction	II-11
		2.	Commonwealth of Virginia	II-11
		3.	Region –The National Capital Region Transportation Planning Board (TPB), the Metropolitan Washington Council of Governments (COG), and the Metropolitan Washington	
			Air Quality Committee (MWAQC)	II-11
		4.	County of Fairfax	II-12
	C.	PRO	OGRAMS, PROJECTS, AND ANALYSES	II-13
		1.	Regional Air Quality Planning	II-13
	D.	LEG	GISLATIVE UPDATE	II-14
		1.	Summary of Air Quality Laws Enacted by the Virginia General Assembly	II-14
	E.	CO	NCLUSIONS AND OBSERVATIONS	II-14
	F.	REC	COMMENDATIONS	II-16
	LIST	Γ OF R	EFERENCES	II-17

III.	EC	OLO	GICAL RESOURCES	III-1
	A.	ISSU	JES AND OVERVIEW	III-1
	В.	PRO	GRAMS, PROJECTS, AND ANALYSES	III-2
		1	Fairfax County Park Authority	III-2
		2.	Northern Virginia Regional Park Authority	III-6
		3.	Fairfax ReLeaf	III-7
		4.	Northern Virginia Conservation Trust	III-7
		5.	Reston Association	III-9
		6.	Northern Virginia Soil and Water Conservation District	III-10
		7.	Fairfax County Wetlands Board	III-11
		8.	Virginia Department of Forestry	III-12
		9.	Virginia Department of Transportation	III-13
		10.	Urban Forestry	III-14
		11.	Riparian and Other Bioengineering Projects	III-21
		12.	Gunston Cove Ecological Study	III-23
		13.	Agricultural and Forestal Districts	III-24
		14.	South Van Dorn Street Phase III Road Project	III-25
	C.	REC	COMMENDATIONS	III-26
	I ICT	r of b	FFFRFNCFS	111_28

IV.	WILDLIFE AND THE ENVIRONMENT IN FAIRFAX COUNTY	IV-1
IV-1.	IMPACTS OF DEER IN FAIRFAX COUNTY	IV-1
A.	OVERVIEW	IV-1
В.	BACKGROUND	IV-1
	 Are Deer Overabundant in Fairfax County? A Description of the Problem 	IV-1 IV-3
C.	ISSUES IN ADDRESSING THE PROBLEM	IV-8
	 Understanding Population Dynamics Determining Carrying Capacity Goals Considering Public Opinion 	IV-8 IV-10 IV-11
D.	METHODS FOR DEER POPULATION MANAGEMENT	IV-11
	 Population Reduction Approaches Conflict Mitigation Approaches 	IV-11 IV-13
Е.	PUBLIC EDUCATION PROGRAM NEEDS	IV-15
F.	PUBLIC AGENCY RESPONSIBILITY	IV-16
G.	PROGRAM IMPLEMENTATION ACTIVITIES	IV-16
Н.	CONCLUSIONS	IV-19
I.	RECOMMENDATIONS	IV-20
A(CKNOWLEDGMENTS	IV-22
LI	ST OF REFERENCES	IV-23

IV. WILDLIFE AND THE ENVIRONMENT IN FAIRFAX COUNTY (continued)

IV-2.	IMPACTS OF GEESE IN FAIRFAX COUNTY	IV-24
A.	OVERVIEW	IV-24
В.	BACKGROUND	IV-24
	1. Origins of the Goose Problem in Fairfax County	IV-24
	2. Environmental Impact of Geese	IV-24
C.	ISSUES IN ADDRESSING THE PROBLEM	IV-26
	1. Goose Population Biology	IV-26
	2. Considerations of Public Opinion	IV-27
	3. Federal Limitations on Remedial Action	IV-27
D.	METHODS FOR POPULATION MANAGEMENT	IV-28
	1. Population Stabilization	IV-28
	2. Population Exclusion	IV-28
	3. Special Foraging Areas	IV-28
	4. Landscaping Modifications	IV-28
	5. Repellents	IV-29
	6. Prohibition of Feeding	IV-29
	7. Combined Approaches	IV-29
E.	PUBLIC EDUCATION PROGRAM NEEDS	IV-29
F.	PUBLIC AGENCY RESPONSIBILITY	IV-29
G.	PROGRAM IMPLEMENTATION ACTIVITIES	IV-30
н.	CONCLUSIONS	IV-31
I.	RECOMMENDATIONS	IV-31
HSI	EFIII. REFERENCES	IV-30

IV. WILDLIFE AND THE ENVIRONMENT IN FAIRFAX COUNTY (continued)

Γ	V-3.	WILDLIFE BORNE DISEASES OF CONCERN IN FAIRFAX COUNTY	IV-33
	Α.	OVERVIEW	IV-33
	В.	 BACKGROUND 1. West Nile Virus 2. Lyme Disease 3. Rabies 4. Fecal Coliform Bacterial Diseases 	IV-33 IV-33 IV-34 IV-36 IV-37
	C.	PUBLIC EDUCATION PROGRAM NEEDS	IV-38
	D.	PUBLIC AGENCY RESPONSIBILITIES	IV-39
	E.	CONCLUSIONS	IV-39
	F.	RECOMMENDATIONS	IV-40
	LIS	T OF REFERENCES	IV-40
V.	so	LID WASTE	V-1
	A.	ISSUES AND OVERVIEW	V-1
		1. Contractual Issues and Landfill Capacity Backup	V-1
		2. Solid Waste Management Plan (SWMP)	V-2
		3. Solid Waste Disposal Fee	V-2
	В.	PROGRAMS, PROJECTS, AND ANALYSIS	V-3
		1. Waste Disposal	V-3
		2. Waste Reduction and Recycling Programs	V-10
	C.	LEGISLATIVE AND REGULATORY CHANGES	V-19
	LIS	T OF REFERENCES	V-19

VI.	HAZARDOUS MATERIALS			VI-1	
	Α.	ISSU	ISSUES AND OVERVIEW		
		1.	Overview	VI-1	
		2.	Hazardous Materials Incidents	VI-1	
		3.	Hazardous Materials in the Waste Stream	VI-2	
		4.	Pipelines	VI-4	
		5.	Rail Transport of Hazardous Materials	VI-4	
	В.	PRO	OGRAMS, PROJECTS, AND ANALYSES	VI-5	
		1.	Fairfax Joint Local Emergency Planning Committee (FJLEPC)	VI-5	
		2.	Railroad Transportation Plan	VI-5	
		3.	Storm Drain Stenciling Program	VI-6	
		4.	Household Hazardous Waste Program (HHW)	VI-6	
		5.	Commercial Hazardous Wastes	VI-6	
	C.	REP	ORTING ENVIRONMENTAL CONCERNS AND ISSUES	VI-7	
	D.	LEG	SISLATIVE UPDATE	VI-9	
	Е.	REC	COMMENDATIONS	VI-9	
	REF	EREN	CES	VI-9	

II. NO	VISUAL POLLUTION, AND	VII-
VII-1.	NOISE	VII-
A.	AIRPORT NOISE	VII-
	 Operations and Associated Noise Impacts at Ronald Reagan Washington National Airport and Washington Dulles International Airport 	VII-
	2. Additions to Washington Dulles International Airport	VII-
	3. Part 150 Noise Compatibility Planning for Ronald Reagan	V 111-
	Washington National Airport	VII-
	4. Potomac Consolidated TRACON: Airspace Redesign	VII-
В.	HIGHWAY NOISE	VII-
	1. Background	VII-
	2. State Policy	VII-
	3. Noise Study Submission Requirements	VII-
	4. State Projects in Fairfax County	VII-
С.	RECOMMENDATION	VII-
VII-2.	LIGHT POLLUTION	VII-
A.	OVERVIEW	VII-
В.	ISSUES AND PROBLEMS	VII-
	1. Glare	VII-
	2. Light Trespass	VII-
	3. Security	VII-
	4. Urban Sky Glow5. Energy Usage	VII- VII-
	J. Energy Osage	V 11-
C.	CURRENT COUNTY STANDARDS AND REGULATIONS	VII-
D.	ADDRESSING THE PROBLEM	VII-1
E.	PUBLIC AGENCY RESPONSIBILITIES	VII-1
F.	PUBLIC EDUCATION AND AWARENESS NEEDS	VII-1
G.	CONCLUSIONS	VII-1
H.	RECOMMENDATIONS Γ OF REFERENCES	VII-1 VII-1

VII. NOISE, LIGHT POLLUTION, AND VISUAL POLLUTION (continued)

VII-3.	VISUAL POLLUTION AND URBAN BLIGHT	VII-18
A.	OVERVIEW	VII-18
В.	SIGNS AND BILLBOARDS	VII-18
С.	TELECOMMUNICATION TOWERS AND UTILITY	
	TRANSMISSION LINES	VII-19
D.	ADDRESSING THE PROBLEM	VII-19
E.	PUBLIC AGENCY RESPONSIBILITIES	VII-20
F.	RECOMMENDATIONS	VII-21
VIII. LA	AND USE AND TRANSPORTATION	VIII-1
A.	ISSUES AND OVERVIEW	VIII-1
	1. Trends and Concepts	VIII-2
	2. Macro Considerations	VIII-3
В.	LAND USE	VIII-3
	1. How is Land Used in Fairfax County?	VIII-3
	2. Land Use Planning	VIII-5
	3. Land Use Monitoring	VIII-5
	4. Land Use History and Buildout Projections	VIII-5
C.	TRANSPORTATION	VIII-9
	1. How do People and Things Move About Fairfax County?	VIII-9
	2. Transportation Decision Making	VIII-14
	3. Programs, Projects, and Analyses	VIII-16
D.	THE INTERRELATIONSHIP BETWEEN LAND USE AND	
	TRANSPORTATION	VIII-18
	1. How are Land Use and Transportation Interrelated?	VIII-18
	2. Programs, Projects, and Analyses	VIII-19
E.	RECOMMENDATIONS	VIII-22
	1. Land Use	VIII-22
	2. Teleworking	VIII-23
	3. Transportation	VIII-23
LIST	COF REFERENCES	VIII-24

APPENDIX A: EQAC RESOLUTIONS AND POSITIONS JANUARY, 2003 THROUGH NOVEMBER, 2003	A-1
APPENDIX B: FAIRFAX COUNTY ENVIRONMENTAL EXCELLENCE AWARDS	B-1
APPENDIX C: ACRONYMS AND ABBREVIATIONS USED WITHIN THE ANNUAL REPORT	C-1

LIST OF FIGURES

Figure No.	Figure Title	Page
I-1	Fairfax County Watershed Map	I-2
I-2	Countywide Site Ratings for IBI	I-7
I-3	Countywide Site Ratings for Habitat	I-7
I-4	Countywide Site Ratings for Fish Abundance	I-7
I-5	Countywide Site Ratings for Drainage Imperviousness	I-7
I-6	IBI vs. Percent Imperviousness	I-8
II-1	Air Quality Trends in Relation to a One-Hour Ozone Standard	II-9
II-2	Air Quality Trends in Relation to an Eight-Hour Ozone Standard	II-10
IV-2-1	Sources of Fecal Coliform Pollution in Accotink Creek	IV-26
V-1	Summary of Initial Performance Data After Retrofits were Implemented	V-6
V-2	Historical Quantities of Refuse Generated in Fairfax County	V-8
V-3	Historical Quantities of Materials Recycled from Fairfax County	V-11
VII-2-1	Effects of Cut-off and Non Cut-off Luminaires	VII-11
VIII-1	Existing Land Use in Fairfax County	VIII-4
VIII-2	Concept Map for Future Development	VIII-6
VIII-3	Average Volume/Capacity V/C Ratios—Existing Peak Hour	
	Conditions (2002)	VIII-12
VIII-4	Average Volume/Capacity V/C Ratios—Future Peak Hour	
	Conditions (2025)	VIII-13

LIST OF TABLES

Table No.	Title	Page
I-1	UOSA Permit Requirements and 2002 Performance	I-14
I-2	NMCPCP Permit Requirements and 2002 Performance	I-16
I-3	Sources of Fairfax County Water Authority Water Supply, 2002	I-34
II-1	Regional Ozone Exceedances, 2002	II-7
II-2	Regional Ozone Exceedances, 2002, Eight Hour Average	II-8
III-1	NVCT Conservation Easements (July 1, 2002 to June 30, 2003)	III-9
III-2	Urban Forestry Division Workload, FY 2001 and 2002	III-15
IV-1-1	Deer Density Surveys	IV-3
IV-1-2	Out of Season Kill Permits Issued For Deer Damage in Fairfax County,	
	Virginia Department of Game and Inland Fisheries	IV-5
IV-1-3	Deer-Vehicle Collisions in Fairfax County	IV-8
IV-3-1	Reported Lyme Disease Cases Meeting Centers for Disease	
	Control (CDC) Case Definition Program, Fairfax County	IV-36
VI-1	How to Report Environmental Crimes	VI-7
VIII-1	Vacant Land in Fairfax County	VIII-8
VIII-2	Existing Land Uses	VIII-8
VIII-3	Planned Land Uses	VIII-9
VIII-4	Where do Residents of Fairfax County Go to Work?	VIII-14
VIII-5	Where do Workers in Fairfax County Come From?	VIII-15

SCORECARD Progress Report on 2002 Recommendations

I. WATER RESOURCES

Water Resources Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
1. EQAC strongly recommends implementation of a Comprehensive Countywide Steam Management Program.	Staff agrees with this recommendation. A major aspect of this recommendation is being pursued through the Watershed Management Initiative – under which the staff will develop watershed master plans for the entire County in the next five to seven years. The baseline Stream Protection Strategy (SPS) report released in January, 2001 included broad stream restoration and preservation recommendations. The SPS study is ongoing. The County is updating its base stream map of all stream channels through a perennial stream mapping project. Significant funding will be required to complete the development of the watershed master plans and to implement the recommendations of these plans.	EQAC's recommendation is on the way to being satisfied – if the County continues with their current activities in this area. EQAC continues to be concerned about the funding needed to complete the watershed master plans and to implement the recommendations. EQAC continues to emphasize this recommendation.	In process, with more to be done.
2. EQAC recommends the funding of the Stormwater Utility Program. The Program should place equal importance between environmental protection, restoration, and monitoring as compared to infrastructure improvement and maintenance. The Program should also include a Watershed Board to oversee the Program.	Staff is developing a Stormwater Utility implementation strategy. A study, Conceptual Plan for a Comprehensive Stormwater Management Program, was completed in March 2000. DPWES proposes to develop watershed master plans over the next five to seven years. As needs are identified in these plans, DPWES will initiate a public education effort. As public awareness increases, DPWES anticipates citizen understanding and support for a Stormwater Environmental Utility will become strong.	EQAC again reiterates its comments from prior years, with emphasis added. EQAC is concerned about the slowness of the process described by staff, with no clear end in sight. EQAC reiterates its recommendation, strongly urging the Board of Supervisors to speedily adopt a Stormwater Environmental Utility Program. Without this program, EQAC is concerned about the continued availability of funds for a Comprehensive Countywide Steam Management Program.	No.

Water Resources Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
3. EQAC recommends posting of affected County streams with a health warning for coliform bacteria until such time that the problem of high fecal coliform bacteria in the County's waters is mitigated.	Posting of individual streams in Fairfax County is not a viable solution to public awareness. Contamination levels of streams are intermittent. Routine posting of streams would be resource intensive and generally ineffective. The Health Department has issued a general advisory to avoid contact with any open unprotected body of water for recreational purposes such as swimming and wading. This advisory is disseminated to the public via a number of channels – including the Health Department's web page and the Fairfax County Annual Stream Water Quality Report. A pamphlet on the implications of high fecal coliform bacteria is being developed in conjunction with the Northern Virginia Soil and Water Conservation District Office and this will be distributed to Fairfax County libraries.	EQAC disagrees that posting is not a viable solution. While the efforts to disseminate information on the problems of contamination in the County's streams is helpful, it doesn't go far enough. The majority of the County's citizens remain unaware of the problems with fecal coliform. EQAC continues to recommend that the County's streams be posted if testing shows contamination.	No.
4. EQAC recommends selective monitoring on the efficiency of stormwater management ponds, other BMPs, and the effectiveness of required erosion and sediment control procedures and structures and enforcement regimes.	This recommendation is being partially addressed at this time. The Kingstown Environmental Monitoring Program is used in evaluating the efficiencies of erosion and sediment controls installed in the Kingstowne development. Also, a second nearby monitoring station has been installed to evaluate nutrient loads from the Silver Springs segment of Dogue Creek. Staff also oversees monitoring activities associated with ad hoc projects. While a comprehensive countywide program to monitor the effectiveness of stormwater management ponds and BMPs would be desirable, it would be cost prohibitive.	EQAC agrees that a comprehensive program would be cost prohibitive. However, EQAC's recommendation is for selective monitoring with the purpose of determining efficiencies. EQAC continues to endorse such a program.	Some small amount.

II. AIR QUALITY Air Quality

Air Quality			
Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
1. EQAC urges the County to take a pro-active approach in air quality, exercising its leadership capabilities to develop a stronger air quality control program that will ensure compliance with a reasonable margin of safety and to work through the COG to persuade other jurisdictions in the Region to do their fair share as well.	Staff agrees with this recommendation and it is in the process of being addressed. In November 2002, the Deputy County Executive initiated a two-track process for developing a strategy to address issues relating to air quality. In a "Declaration on Air Quality Leadership", in February 2003, the County Executive tasked each agency director to take appropriate actives to improve air quality consistent with regional efforts.	While the County is taking a more proactive approach, not all of EQAC's recommendation is being adequately addressed. Interactions, such as joint ECC/EQAC meetings, have begun to look at future air quality planning. However, actions such as losses in County Staff in the Health Department are counter to this recommendation and severely impact the County's ability to monitor air quality.	Some, but more needs to be done.
2. EQAC renews its recommendation that Fairfax County strengthen its own capability to understand the technical air quality issues, identify and evaluate the impact of alternative approaches to ensuring improved air quality, develop policies and programs that can be applied regionally to accomplish that goal, and persuade other jurisdictions to join in these efforts.	This recommendation is being addressed, although through a different mechanism from EQAC's proposal to hire an Air Quality Planner.	The County identified a senior staff person to work directly with the Office of the County Executive. However, this tasks an overworked staff member with additional responsibilities rather than the EQAC approach of hiring a person trained in the rigorous technical challenges of air quality management. Furthermore, the cutting back of expertise in the Health Department is hardly consistent with the County strengthening its technical capability in air quality issues.	No.

×	
i_a	
\sim	
_	٠

Air Quality Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
3. EQAC recommends that the Board of Supervisors devote more of its energies to understanding and addressing the difficult issues raised by the Region's air quality problems, both in its own decisions and in the guidance it provides to the County's land use and transportation boards and staffs.	The recommendation has already been addressed. The Chairman of the BOS, plus Supervisors Bulova, Kauffman, and Hudgins are active in either the Metropolitan Washington Air Quality Committee or the Metropolitan Transportation Planning Board. Supervisor Bulova is active in Clean Air Partners. The BOS is also active in sending letters to state and federal representative in support of air quality initiatives.	EQAC recognizes that the BOS has been active in activities addressing regional air quality. However, the loss of personnel in the Health Department and the failure to hire an Air Quality Planner means that the required institutional awareness that should be supporting the BOS is not fully there. Considering that the BOS does change, such institutional awareness is necessary for the BOS to understand and address air quality issues.	Somewhat, however more needs to be done in the area of supporting institutional awareness.
4. EQAC recommends that the County set a deadline of June 30, 2003 for the adoption of a new Air Quality Attainment Strategy – a public document adopted by the Board that sets out the policies and priorities that Fairfax County intends to pursue within the County and though COG to ensure the achievement of the necessary levels of air quality with a reasonable margin of safety.	This recommendation is in the process of being addressed. Staff concurs with the general concept behind this recommendation; however, staff does not support the time frame recommended by EQAC or the hiring of new staff.	EQAC notes that June 30, 2003 has come and gone without the public document recommended by EQAC. EQAC's recommended timeline was based on concerns about the likelihood of ongoing ozone non-attainment in the County and EQAC's fears regarding what we see on the horizon concerning potential ramifications under the Clean Air Act. EQAC believes that the County should develop a timely public document that establishes policies and priorities. The Spring of 2004 will be critical for the management of air quality in this County.	No.

III. ECOLOGICAL RESOURCES

Ecological Resources			
Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
1. EQAC recommends that the County BOS develop and implement a Countywide Natural Resource Management Plan. Two tasks should be done first: complete a Countywide Baseline Natural Resource Inventory and adopt a unified Natural Resource Conservation Policy.	Staff concurs with EQAC's recommendation. The Fairfax County Park Authority (FCPA) completed development of a modeling tool to identify significant natural and cultural resources in the County. FCPA, using the County's geographic information system (GIS), produced a Countywide "Green Infrastructure" model and resultant map. The natural resource inventory effort continued this year and included the development of a limited database linked to the County GIS system.	This is a long-standing EQAC recommendation. As noted in earlier Annual Reports on the Environment, EQAC commends the Park Authority and fully supports its efforts. EQAC also notes that efforts are underway that support EQAC's recommendation. Additionally, FCPA is in the process of creating a Natural Management Plan for parklands. However, unless increased staff and resources are allocated to these efforts, and an overall programmatic strategy is developed, EQAC's recommendation will not be satisfied. EQAC reiterates its recommendation.	Some progress, but more needs to be done.
2. EQAC recommends continued support for the public-private partnership with the Northern Virginia Conservation Trust (NVCT) and further recommends the existing three-year agreement be extended.	The Department of Planning and Zoning (DPZ) concurs with the recommendation since the NVCT partnership has been an important tool for supporting the open space and environmental preservation goals of the BOS. The recommendation to extend the MOU with NVCT is not currently being addressed since the current MOU extends through FY 2004. DPZ should make a recommendation to the BOS on the renewal of the MOU in early FY2004.	EQAC commends the BOS for creating the public-private partnership with NVCT. EQAC encourages the BOS to provide the required annual funding and to extend the MOU past three years.	Yes.
3. EQAC recommends that the BOS continue to support proposals to amend Virginia State Code §15.2-96 1, allowing the County to enact tree preservation ordinances.	The BOS did support such action; however, the proposed changes did not become law and the Senate Bill was not carried to the 2003 session. County staff worked to develop tree conservation language for the 2003 session; however, the resulting proposal was not patronized by any of the local Virginia State representatives and was therefore not introduced into the 2003 Legislative Assembly.	EQAC is extremely disappointed that none of the Fairfax County's elected representatives to the Legislature would support this action. EQAC continues to recommend that the BOS continue to pursue legislation that would allow a tree preservation ordinance.	No.

XX1V

IV-1. IMPACTS OF DEER IN FAIRFAX COUNTY

Deer Management			
Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
1. EQAC recommends that the Board of Supervisors continue to implement and monitor the comprehensive deer management program as set forth in the November 1998 Integrated Deer Management Plan and refined by the Deer Management Committee in the summer of 1999 and in subsequent meetings.	Indicators support the belief that Bull Run Regional Park and Upper Potomac Regional Park have attained the desired herd density of 15-10 deer per square mile. Meadowlark Gardens density is zero since the park is encompassed by a deer-proof fence. During the growing season of 2002, a marked improvement was noted in the understory at Bull Run Regional Park. While it will take years for the habitat to rebound, these signs are encouraging. The Park Authority concurs with this recommendation and has been following the management principals referenced by EQAC.	EQAC notes that actions taken to date continue to support EQAC's recommendation, but the results are a long way from restoring natural areas to the former levels of biodiversity. The change at Bull Run Regional Park is encouraging; however, actions to manage the deer population need to continue and to be increased.	In process.
2. EQAC strongly endorses on-going public input into the Deer Management Plan.	The Deer Management Committee meets to review and comment on the results of management efforts ad on staff recommendations. The County web page devoted to deer management issues continues to be updated. Presentations about deer issues and the County's plan of response are routinely provided to citizens at various meetings such as community association meetings, Police Department Citizen Advisory Committee meetings, and Police Department Citizen's Police Academy sessions.	These efforts are providing the desired public input and should be continued.	Yes.
3. EQAC strongly commends active participation of the Fairfax County Park Authority in the deer management program.	Fairfax County Park Authority has been a full partner in developing the County's deer management program. The FCPA and Animal Services should continue to partner in a comprehensive deer management program.	EQAC encourages continued participation by FCPA in deer management.	Yes.

~	
\sim	
\sim	

Deer Management Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
4. EQAC believes the deer management program must address problems of small private property owners. 5. EQAC believes the	The Virginia Department of Game & Inland Fisheries (DGIF) will issue permits to property owners experiencing damage from any wildlife, but many citizens are not aware of this program. DGIF and Fairfax County have increased efforts to inform citizens of this program. Additionally, state code now allows an extended urban archery deerhunting season. The County Deer Management web page provides information about methods available to private property owners. Animal Services and FCPA continue to provide outreach with private landowners who control property adjacent to public lands to develop and coordinate deer management programs.	While the staff response outlines some options available to small private property owners, more needs to be done. EQAC recognizes the this problem is complicated by the overlay of existing State regulations and recommends that County program officers work closely with State officials to ease these where possible. The deer management program is	In process.
management program must accomplish: (1) immediate, sustained reduction of deer population; (2) ongoing monitoring of availability of methods for maintaining population limits; (3) consideration of development and its effects on ecosystem health and biodiversity.	herds to levels consistent with long-term carrying capacity of remaining habitats. Fairfax County continues to monitor developments and progress of non-lethal methods of deer herd control. The Wildlife Biologist is working in cooperation with other agencies to identify additional means of data collection to address ecosystem health and biodiversity issues.	making inroads into the overpopulation of deer in the County. However, this needs to continue until all local herds have been reduced to levels consistent with carrying capacity.	
6. EQAC recommends the Board of Supervisors continue to provide for a vigorous and enhanced program of public education.	Educational efforts have been underway since the start of the Deer Management Program. Additional measures are now being considered, including better use of the County's cable TV and updating of publications in the County Library system. (The staff response goes on to list a large number of educational efforts done in the last year.)	The County certainly has been conducting a vigorous program of public education. This program needs to be continued and enhanced such as suggested by County staff.	Yes.

XXV]

IV-2. IMPACTS OF GEESE IN FAIRFAX COUNTY

Geese Management Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
1. EQAC finds the current programs are effective and should be continued.	The Animal Services concurs with EQAC's recommendation and intends to continue and expand the current programs.	EQAC continues to support continuation and expansion of current efforts.	Yes.
2. EQAC feels that the current programs need to be replicated in many other areas of the County.	The Fairfax County Wildlife Biologist, in association with GeesePeace, conducts a series of volunteer training sessions prior to the spring nesting season each year.	The training of volunteers, and other efforts to control the geese population, should continue.	In process.
3. EQAC recommends enhanced public education outreach to sensitize Fairfax residents to the pollution problems caused by geese and the programs available for addressing them.	The Animal Services Division is presently partnered in a public/private partnership with GeesePeace. This organization provides information to County residents who experience problems with Canada geese. In 2002, the Office of Public Affairs sent a news release to the media announcing the geese stabilization program.	EQAC recommends continuation of public education efforts.	In process.
4. EQAC recommends enhanced public outreach to acquaint Fairfax residents with the destructive role excessive goose populations play in our marshland habitats.	The Animal Services Division will be working in cooperation with State and Federal officials to gather data on the effects of resident goose populations upon local tidal marshlands. This information will be provided to the public through existing methods. The Division is working with Channel 16 to produce programming to cover Canada geese.	EQAC encourages the collection of these data and the dissemination to Fairfax County citizens.	In process.

XXVI

IV-3. WILDLIFE BORNE DISEASES OF CONCERN IN FAIRFAX COUNTY

Wildlife Borne Diseases	Wildlife Borne Diseases			
Recommendations	Action taken by Agency or Department	EQAC Comments	Completed	
1. The Health Department should continue the Stream Monitoring Program and post advisories on currently polluted waters.	The Health Department and DPWES are working to implement a comprehensive Countywide Stream Management Program that will consolidate all monitoring efforts into a single program. The new program will decide the most effective method of posting advisories on polluted waters.	EQAC continues to support this recommendation, encouraging the BOS to provide active support to the reorganized Stream Monitoring Program.	In process.	
2. The Health Department should continue and enhance its excellent public education programs.	The Health Department will continue to develop and enhance public education information dealing with public health issues. Presently, educational emphasis is on mosquito control and West Nile virus.	As stated, EQAC believes the Health Department's efforts are creating excellent public education programs.	Yes.	
3. The Police Department should continue its animal control program and, in conjunction with the Health Department, expand public education initiatives in key areas such as rabies and wildlife contributions to pollution of surface waters.	The Animal Services Division routinely provides the public with information on rabies and other wildlife borne diseases. Rabies is addressed on the Animal Services webpage. A new program will soon begin whereby Animal Control Officers will canvass neighborhoods near areas with a high number of positive rabies cases. They will check for rabies vaccinations and inform residents of efforts to control rabies. The Wildlife Biologist established an email group for rapid conveyance of wildlife disease information.	EQAC supports the current efforts by the Animal Services Division, the Health Department, and the Wildlife Biologist/	Yes.	
4. The potential need for Countywide mosquito abatement programs as a means of suppressing West Nile Virus and malaria should be vigorously evaluated.	The Health Department, through the County's Environmental Coordination Committee, established a multi-agency committee, the Mosquito Surveillance and Management Subcommittee, to vigorously evaluate and develop recommendations for a county-wide mosquito abatement program. The Health Department is working with the newly formed Emerging Mosquito Pathogen Subcommittee of the COG Health Officials Committee to review and update a regional coordinated response to mosquito pathogens.	EQAC endorses these efforts and recommends full support by the BOS.	In process.	

KXV111

V. SOLID WASTE

Solid Waste Recommendation	Action taken by Agency or Department	EQAC Comments	Completed
1. The County could benefit from applying a thorough "Future Analysis" or "Risk Analysis" of the overall program to look for additional potential weaknesses and develop action plans for any identified weaknesses.	In January 2003, the Solid Waste Management Program started work on the new Solid Waste Management Plan for the County. As part of this Plan, the County will be looking at strategic issues and potential weaknesses in the system that may need support.	EQAC supports this effort currently underway.	In process.
2. EQAC continues to be concerned with the economics of waste disposal in Fairfax County. EQAC feels that business process re-engineering could yield options to consider in a cost benefit analysis.	The Solid Waste Management Program performs an Activity Based Cost Analysis on the various program activities and work to reduce cost to each program element. Further analysis of the economics of the overall solid waste program will be conducted as part of the solid waste management planning effort.	EQAC support the efforts of the Solid Waste Management Program and will continue to interact with senior members of the Program.	Yes.
3. EQAC remains opposed to any action to subsidize tipping fees, and we do not support any proposal that would reduce the effectiveness of recycling programs by redirecting waste paper products to the Energy/Resource Recovery Facility (E/RRF).	Staff recognizes EQAC's concerns with regard to subsidized tipping fees. Staff analysis of the Citizen's Disposal Facility indicated a need to raise fees, which is proposed for FY 2004. The County has never considered redirecting waste paper products to the E/RRF. In fact, the County has taken steps to expand the paper collection/recycling activities in the County waste collection areas.	EQAC will continue to interact with the Solid Waste Management Program staff in regard to tipping fees.	Yes.

VI. HAZARDOUS MATERIALS

VI. HAZARDOUS MA	IERIALS	<u> </u>	<u>†</u>
Hazardous Materials Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
1. EQAC recommends an aggressive pubic education campaign on how to properly dispose of household/residential, commercial, and industrial hazardous waste. A "How to chart that can be easily read and kept for continued reference is suggested. Partnering with groups and businesses to provide the money and much of the work is suggested.	DPWES cited information dissemination on this subject being done through their current literature, telephone message, and web site. They also cited work with businesses and Homeowner Associations as well as their electronic collections throughout the year and a Fairfax Fair exhibit. Funding for a more expansive outreach is not planned at this time.	EQAC recognizes outreach and educational efforts made by Staff for hazardous materials disposal. These efforts have reached many people and businesses and should be continued. However, EQAC believes more homeowners and home businesses need to be educated about hazardous materials in homes and home offices. Many people do not think to call or look on the web page and are not part of formal homeowner associations. EQAC believes creative partnering may be able to accomplish this with little cost to the County.	Partially completed.
2. The reporting of PERC releases is limited to those incidents where the business, usually dry cleaners, is currently operating. Ground contamination from businesses no longer in operation is only reported if the chemical has reached a water source or affects another property. EQAC recommends the reporting of all ground contamination that requires environmental cleanup prior to land use applications.	Fire & Rescue noted that the scope of spilled or leaked chemicals is much broader than PERC. DPZ recommends an applicant commit to the performance of site investigations for properties where potential for contamination is suspected. Staff does not feel it is essential for this information to be provided prior to action on individual zoning cases as long as there is a proffer or development condition that insures the issue will be dealt with prior to site development. There are at least two different ways site contamination issues have been dealt with successfully through proffers or development conditions. DPZ recognized through this recommendation that staff is not always aware of the full history of each site that is subject to zoning review. Planned enhancements of current databases used for DPWES permitting process, Fire Prevention Code Permits, and HMIS would improve the availability of information.	EQAC is optimistic that the ISIS database program currently under review and soon to be under vendor contact will provide a more complete coordinated sharing of information.	In progress.

~	4
~	
Κ.	
~	
^	d

Hazardous Materials Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
3. Environmental crimes require citizen's eyes. EQAC recommends an advertisement and educational campaign to state what types of hazardous materials and other environmental situations citizens are requested to report including who they are to contact. This could be done through community association newsletter, press release story to the media, and age appropriate material sent home through the schools.	Fire & Rescue, DPWES, and OPA currently have an educational campaign that includes displays at County events and information to responsible parties of hazmat incidents. They are currently using the FJLECP's brochure on how to report spills, leaks, or releases of hazardous materials. Staff concurs that an increased awareness creates an informed public and listed five actions to pursue that will have minimal fiscal impacts.	EQAC agrees with the Staff's actions to pursue and thinks this will help educate the citizens. EQAC suggests two additional venues for citizen education: The Police Academy for citizens active with Neighborhood Watch and the Police Citizen Advisory Councils; and the Community College programs being offered through some District Councils. EQAC is concerned that the FJLEPC brochure on spills, leaks, and releases may be written for businesses and not average citizens.	Some progress, but more needs to be done

VII-1. NOISE

Noise Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
1. EQAC recommends the County Executive and his staff continue to monitor the EIS for the FAA TRACON project.	In January 2003, DPZ received a copy of the Final Environmental Impact Statement for the Potomac Consolidated TRACON Airspace Redesign. DPZ will review the document and comment to the FAA as appropriate.	Staff should continue to monitor this issue.	In process.
2. EQAC recommends that the Fairfax County Executive and his staff should continue to monitor the MWAA quarterly reports and statistics to monitor trends associated with complaints, violations, and civil penalties.	While there is no formal review process for the quarterly monitoring reports from the Metropolitan Washington Airports Authority (MWAA), staff reviews these reports and coordinates with MWAA on an informal basis when questions arise. Data regarding complaints and violations are provided by MWA annually.	The current staff approach should continue.	Yes.

VII-2. LIGHT POLLUTION

Light Pollution Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
1. EQAC recommends that the Board of Supervisors direct DPZ to immediately correct the deficiencies in the draft revised ordinance to address lighting standards and practices in the County and the problems of light pollution.	Staff prepared and circulated a draft proposal in September 2002. As a result of received comments, staff revised the proposal and circulated a second draft in November 2002. After this, staff received additional comments and is considering additional changes.	The staff did incorporate additional changes that satisfied EQAC's concern and the Board of Supervisors did pass the revised ordinance.	Yes.
2. EQAC recommends that the Board of Supervisors direct that future lighting fixtures installed in the County follow the recommendation of the Illuminating Society of North America (light be directed down).	The Board of Supervisors, on January 24, 2000, approved changes to the Citizen Petition Street Light Program Policy to reduce light pollution from County streetlights. Under the changed policy, new streetlights will use "cutoff" optics that totally directs light downward. Efforts are continuing to amend the PFM to formalize the requirement that new streetlight installations have cutoff optics. Semi-cutoff cobra head fixtures may be used where cutoff installations are not economically practical to need lighting standards. However, since January 2000, it has not been necessary to install any new semi-cutoff cobra head fixtures. Based on this experience, DPWES will standardize all new cobra head streetlight installations with the cutoff optic system. A PFM amendment is in the approval process to formalize the requirements that all new cobra head streetlight installations be cutoff.	EQAC is pleased that the recommendations of the Illuminating Society of North American will be followed.	Yes.

Light Pollution Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
3. EQAC recommends that the Board of Supervisors direct that all older lighting fixtures under County control that do not meet the above standard be replaced on a phased basis.	At the present time, there are no funds available for the initial conversion of the existing streetlights or the additional annual operation and maintenance (O&M) payments for the increased intensity required for some of the older fixtures (some of the older fixtures do not meet current lighting standards – replacing them with cutoff fixture would require an increase in wattage).	EQAC reiterates the recommendation. Additionally, saying that replacing some fixtures with cutoff optics would result in cost increases is flawed logic. Since these do not meet lighting standards, they should be replaced with upgraded wattage lights. The replacement, with cutoff optics, would be cheaper than a replacement without cutoff optics. However, the use of cutoff optics will reduce the wattage required. Overall, estimates are that the cost of conversion will be repaid by lower O&M costs within a three to five year period.	No.
4. EQAC recommends that the Board of Supervisors work with VDOT and elected officials to replace existing roadway lighting fixtures (under the control of VDOT) with those in recommendation #3.	No response received from VDOT.	EQAC reiterates this recommendation.	No.

Light Pollution Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
5. EQAC recommends that the BOS direct the County Attorney to evaluate the feasibility of seeking a legal determination at the Virginia Supreme Court level of whether VDOT can be required to consider a County outdoor lighting ordinance in planning and implementing roadway lighting within the County.	The Environmental Coordinating Committee does not concur with this recommendation. The Supreme Court of Virginia will not give an advisory opinion on a matter when there is no case before it. However, Staff recommends that VDOT be requested to consider the County's lighting ordinance in the planning and implementing roadway lighting within the County.	Since EQAC's recommendation is not feasible, EQAC supports the staff recommendation in that VDOT be requested to consider the County's lightening ordinance.	No further action needed.
6. EQAC recommends that the Board of Supervisors direct County staff to prepare brochures and information on a web site to promote public awareness of light issues. EQAC also recommends a brochure be prepared to help educate architects, contractors, electricians, and builders to what the County permits in the field of illumination.	Staff concurs with this recommendation and believes that public education of any new regulations is extremely critical. However, staff believes that development of such materials prior to adoption of new regulations in this area would be an inefficient use of staff's time and resources.	After the staff response was prepared, the BOS passed the revised lightening ordinance. Staff followed up and prepared an outstanding brochure that covered both of EQAC's recommended topics.	Yes.

VII-3. VISUAL POLLUTION

Visual Pollution Recommendations	Action taken by Agency or Department	EQAC Comments	Completed
1. EQAC supports the recommendations made by the Fairfax County Task Force and recommends that the Board of Supervisors implement these recommendations.	The Sign Task Force report contained nine recommendations; four of which involved requests to amend the Virginia Code. The first recommendation concerned requesting an amendment to Va. Code Sec. 33.1-375.1 to modify the terms of an agreement that the County could enter into with the Commonwealth Transportation Commissioner to allow the County to enforce the limitations on illegal signs in the right-of-way. The BOS concurred with this recommendation and a bill was introduced into the General Assembly to make this modification. The other three recommendations to amendments to the Virginia Code were not supported by the BOS. The remaining recommendations are currently under staff review.	EQAC reiterates its support of the general premises underpinning the Task Force recommendations.	No.

LAND USE AND TRANSPORTATION

Land Use and Transportation Recommendation	Action taken by Agency or Department	EQAC Comments	Completed
1. Fairfax County has recognized the interrelationship of land use and transportation. This interrelationship should continue to be part of the planning and development process. Note should be taken here, however, to the concerns of EQAC with respect to air quality and water quality as they relate to this planning and development process.	This recommendation is in the process of being addressed through Comprehensive Plan implementation activities. However, additional actions can improve the Comprehensive Plan's implementation. Some examples are: • To improve Transportation Demand Management efforts in order to reduce vehicle miles traveled per capita; • To improve coordination of development with the provision of additional regulatory tools such as adequate public facilities, impact fees, and transfer of development rights; • To significantly increase funding for transportation facilities through increased State support and other new sources of funding.	EQAC has again revised the Land Use and Transportation chapter in the 2003 Annual Report to reflect EQAC's continuing study in land use and transportation. The County needs to continue to look at land use practices and transportation strategies with the goal of reducing the current negative impacts we are seeing in air quality, water quality, and the increasing congestion on County roadways.	No, but the process has started.
2. EQAC recommends the County implement Comprehensive Plan guidance for the Tysons Corner Urban Center, the Reston-Herndon Area Suburban Center and Transit Station Areas, and the Merrifield Suburban Center.	Staff concurs with this recommendation and notes that this recommendation is in the process of being addressed through Comprehensive Plan implementation activities.	EQAC continues to recommend the implementation of the Comprehensive Plan guidance.	In process.
3. EQAC recommends that the Dulles Rapid Transit Project be implemented with an option that brings rail to Tysons Corner and rail to the Dulles Corridor as soon as possible.	This recommendation is being addressed. In October 2002, the BOS endorsed Option T6 as the Locally Preferred Alternative. This option brings Metrorail through Tysons Corner and the Dulles Corridor. In November 2002 WMATA approved this option, followed by approval in December 2002 by the Commonwealth Transportation Board. The County is working with the state to obtain necessary approvals and to construct this rail line as quickly as possible.	EQAC supports the County's efforts and notes that rail is essential to the implementation of the Tysons Corner Urban Center.	In process.